

APPENDIX 5.4
Monitoring Well and
Soil Boring Permit



PERMIT #LMON102307
A.P.N. #435-480-15
EST #H186426 -

**COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION**

MONITORING WELL AND BORING CONSTRUCTION AND DESTRUCTION PERMIT

SITE NAME: FORMER MISSION BAY SLF

SITE ADDRESS: 2512 QUIVIRA CT., SAN DIEGO CA 92123

PERMIT FOR: **4 GROUNDWATER MONITORING WELLS & 10 SOIL BORINGS**

PERMIT APPROVAL DATE: JUNE 14, 2004

PERMIT EXPIRES ON: OCTOBER 12, 2004

RESPONSIBLE PARTY: CITY OF SAN DIEGO ENV. SERVICES DEPT., DISP. DIV.

PERMIT CONDITIONS:

1. Wells must have a **minimum 3-foot concrete surface seal**. The surface seal shall consist of concrete able to withstand the maximum anticipated load without cracking or deteriorating. The concrete should meet Class A specifications of a minimum 4000-pound compressive strength.
2. All water and soil resulting from the activities covered by this permit must be managed, stored and disposed of as specified in the SAM Manual in Section 5, E- 4. (http://www.sdcountry.ca.gov/deh/lwq/sam/manual_guidelines.html). In addition, drill cuttings must be properly handled and disposed in compliance with the Stormwater Best Management Practices of the local jurisdiction.
3. Within 60 days of completing work, submit a well construction report, including all well and/or boring logs and laboratory data to the Well Permit Desk. This report must include all items required by the SAM Manual, Section 5, Pages 6 & 7.
4. This office must be given 48-hour notice of any drilling activity on this site and advanced notification of drilling cancellation. Please contact the Well Permit Desk at 619) 338-2339.

NOTE: This permit does not constitute approval of a work plan as defined in Section 2722 of Article 11 of C.C.R., Title 23. Work plans are required for all unauthorized release investigations in San Diego County.

APPROVED BY: *Carol Sprangenberg* DATE: 06/14/2004
CAROL SPRANGENBERG

NOTIFIED: 6-14-04 J.M.

for

RECEIVED

JUN 17 2004

EBS
SCS Engineers Co



PERMIT APPLICATION
GROUNDWATER
AND
VADOSE MONITORING WELLS
AND EXPLORATORY OR TEST BORINGS

COPY

OFFICE USE ONLY	
PERMIT #	VL MON 102307
SAM CASE Y/N	#H 196424
DATE RECEIVED:	6-1-04
FEE PAID:	1215.-
CHECK #	180054 10222

A. RESPONSIBLE PARTY City of San Diego, Env. Services Dept., Disp. Div. Phone 858.694.7000
Mailing Address 9601 Ridgehaven Ct., Ste. 310 City San Diego State CA Zip 92123
Contact Person Steven F Fontana Phone 858.694.7000 ext. _____

B. SITE ASSESSMENT PROJECT IF APPLICABLE #H 86426

C. CONSULTING FIRM Environmental Business Solutions
Mailing Address 8799 Balboa Ave., Ste 290 City San Diego State CA Zip 92123
Registered Professional Tessa McRae Registration # 6582 (RC, RCE, CEG)
Contact Person Keith Etchells Phone 858.571.5500 ext. 240

D. DRILLING COMPANY West Hazard Drilling Corp. C57# 554979 Phone 619.686.5800
Mailing Address 3620 Kurtz Street City San Diego State CA Zip 92110

E. CONSTRUCTION INFORMATION

TYPE OF WELLS/ BORINGS TO BE CONSTRUCTED	MATERIALS TO BE USED		PROPOSED CONSTRUCTION
	CASING	SEAL/BORING BACKFILL	
<input checked="" type="checkbox"/> Groundwater # <u>4</u> <input type="checkbox"/> Vadose <input type="checkbox"/> Boring <input type="checkbox"/> Other	Not Applicable Type <u>PVC</u> Gauge <u>Sh. 40</u> Diameter <u>2"</u> Well Screen Size <u>0.010</u> Filter Pack <u>#2/12</u> (Specify)	<input type="checkbox"/> Neat Cement <input type="checkbox"/> Cement & Bentonite <input type="checkbox"/> Sand-Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other	Estimated ground water depth <u>20</u> ft. Estimated depth of boring <u>30</u> ft. Concrete surface seal <u>0'</u> to <u>3'</u> Annular seal <u>3'</u> to <u>10'</u> Bentonite transition seal <u>10'</u> to <u>13'</u> Filter Pack <u>13'</u> to <u>30'</u> Perforation <u>15'</u> to <u>30'</u>
NUMBER OF WELLS TO BE DESTROYED # <input type="checkbox"/> _____	Drilling Method <input checked="" type="checkbox"/> Auger <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Percussion <input type="checkbox"/> Air Rotary <input type="checkbox"/> Other		NOTE: Attach a well construction diagram for wells with multiple completions

I agree to comply with the requirements of the current Site Assessment and Mitigation Manual, and with all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction.

DRILLER'S SIGNATURE [Signature] DATE _____

Within 60 days of completion, I will furnish the Monitoring Well Permit Desk with a complete and accurate well/boring log. I will certify the design and construction/or destruction of the well/borings in accordance with the permit application.

RG/RCE/CEG SIGNATURE [Signature] DATE 5/26/04

F. SITE INFORMATION

1. ASSESSOR'S PARCEL NUMBER 435 4801500

Site Name Mission Bay Park

Site Address 2512 Quivira Ct. City San Diego Zip 92109

PROPERTY OWNER City of San Diego Refuse Disposal Division Phone 492 5035

Mailing Address 4590 Murphy Canyon Rd. 101 City San Diego State CA Zip 92123-4325

NUMBER OF WELLS 4 TYPE OF WELLS MONITORING

2. ASSESSOR'S PARCEL NUMBER _____

Site Name _____

Site Address _____ City _____ Zip _____

PROPERTY OWNER _____ Phone _____

Mailing Address _____ City _____ State _____ Zip _____

NUMBER OF WELLS _____ TYPE OF WELLS _____

3. ASSESSOR'S PARCEL NUMBER _____

Site Name _____

Site Address _____ City _____ Zip _____

PROPERTY OWNER _____ Phone _____

Mailing Address _____ City _____ State _____ Zip _____

NUMBER OF WELLS _____ TYPE OF WELLS _____

4. ASSESSOR'S PARCEL NUMBER _____

Site Name _____

Site Address _____ City _____ Zip _____

PROPERTY OWNER _____ Phone _____

Mailing Address _____ City _____ State _____ Zip _____

NUMBER OF WELLS _____ TYPE OF WELLS _____

G. FEES (in effect beginning July 1, 2003 through June 30, 2004):

ACTIVITY	FEE SCHEDULE	AMOUNT
Permit for Well Installations Only (Groundwater Monitoring Wells, Vadose, Vapor Extraction Wells) Permit for Well Maintenance Inspection (Valid for three years)	\$165.00 for the first monitoring well \$ 90.00 for first well maintenance inspection	\$165.00 \$ 90.00
Each Additional New Well	\$140.00 for each additional well installation \$ 30.00 for each additional well maintenance inspection	<u>3</u> x \$140.00 \$ <u>420.00</u> <u>3</u> x \$ 30.00 \$ <u>90.00</u>
Permit for Borings Only (CPT's, Hydropunch, Geoprobos, Temporary Well Points, etc.)	\$165.00 for the first boring \$45.00 for each additional boring	\$165.00 _____ x \$ 45.00 \$ _____
Permit for Well Destructions Only	\$165.00 for the first destruction \$110.00 for each additional destruction	\$165.00 _____ x \$110.00 \$ _____
Permit for any Combination of Well Installations, Borings, & Destructions <i>(except UST backfill permit)</i>	The first activity will be \$165.00. <i>(If first activity is a well, add in \$ 90.00 for the first well maintenance inspection.)</i> Additional activities will be as follows: \$140.00 for each additional well \$ 30.00 for each additional well maintenance inspection \$ 45.00 for each additional boring \$110.00 for each additional well destruction	\$165.00 (_____ x \$ 90.00 _____) _____ x \$140.00 \$ _____ _____ x \$ 30.00 \$ _____ _____ x \$ 45.00 \$ _____ _____ x \$110.00 \$ _____
Permit for Underground Storage Tank Monitoring System in Backfill <i>(i.e. Enhanced Leak Detection)</i>	\$305.00 (Flat Fee)	\$305.00
	TOTAL COST OF PERMIT	<u>\$765.00</u>

H. QUESTIONNAIRE:

Please answer all applicable questions completely. For well destructions, complete only #1 below and submit any required supportive documentation.

1. If wells are to be destroyed, provide a description of method of destruction. Not applicable

2. What is the purpose of the well/boring investigation?

- ☒ a) Part of an on-going site assessment case in which DEH or another government regulator is the lead agency.
- ☐ b) Part of a Phase I investigation for property ownership transfer or: _____
- ☐ c) Geotechnical investigation for proposed construction, land stabilization or: _____
- ☐ d) Other: _____

3. What procedures will be used to prevent the well/boring from providing an avenue to contamination during construction?

Augers will be left in boring until seal is placed.

4. What field procedures will be utilized to determine if contamination exists?

Soil sample screening with the use of a calibrated photo ionization detector (PID), as well as visual and olfactory observation.

5. What procedures will be used to determine whether samples will be sent for laboratory testing or archiving?

Soil sample screening with calibrated PID, as well as visual and olfactory observation.

6. What constituents will be monitored and tested (Include EPA Laboratory Test Methods to be used)?

VOCs (EPA 821.0B), SVOCs (EPA 821.0), PCBs (EPA 808.2A), Pesticides (EPA 808.1), Chlorinated Herbicides (EPA 815.0), PAHs (EPA 831.0), THeZL Mphs (EPA 601.0B), Cyanide (EPA 335.2), PH (EPA 150.1)

7. How will samples be transported and preserved?

In a clean, ice-filled cooler.

8. What sampling methods will be used? Split spoon sampler.

9. Are you proposing a variation from the methods and/or procedures presented in the requirements for the construction or destruction of Vadose and Ground Water Monitoring Wells (Current SAM Manual Requirements)? If yes, specify these variations and include a well construction diagram and all required supporting documentation. Refer to the SAM Manual Appendix B for monitoring well guidelines (http://www.sdcountry.ca.gov/deh/lwq/sam/monitoring_well.html).

No.

10. Are you proposing a variation in drilling and destruction of soil borings from the methods and/or procedures specified in the current SAM manual? If yes, specify these variations and include a destruction diagram.

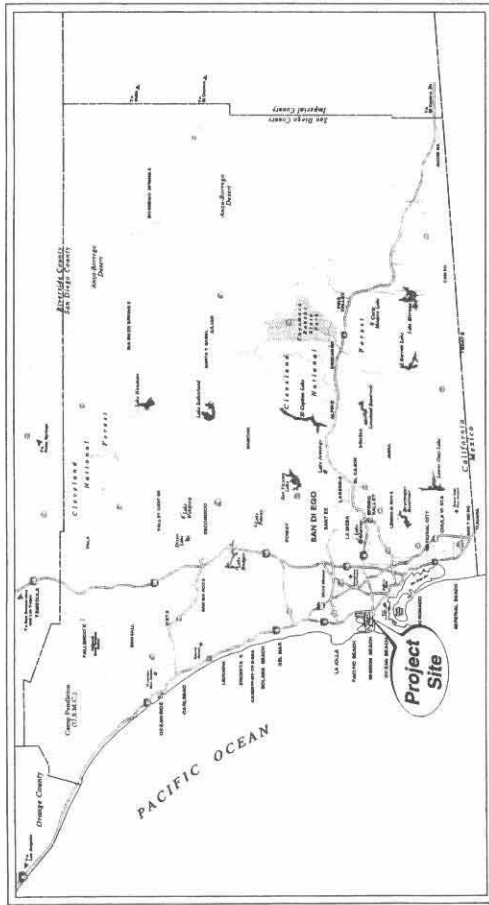
No.

11. What procedures will be used to ensure that no contamination will be introduced by the drilling equipment?

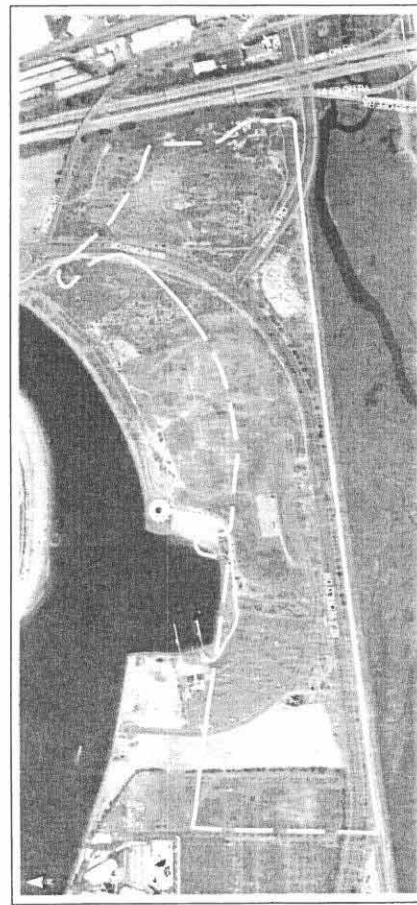
Inspect rig for cleanliness before drilling and decontaminate equipment w/ high pressure steam cleaner between borings.

12. What methods will be used to clean sampling equipment? All sampling equipment will be decontaminated w/ a tap water and Alconox™ detergent, then rinsed w/ deionized water (twice from separate containers).

13. What cleaning method will be used to clean casing and screen prior to installation? All materials used in well construction will arrive packaged and pre-cleaned and will be handled using clean, disposable gloves.



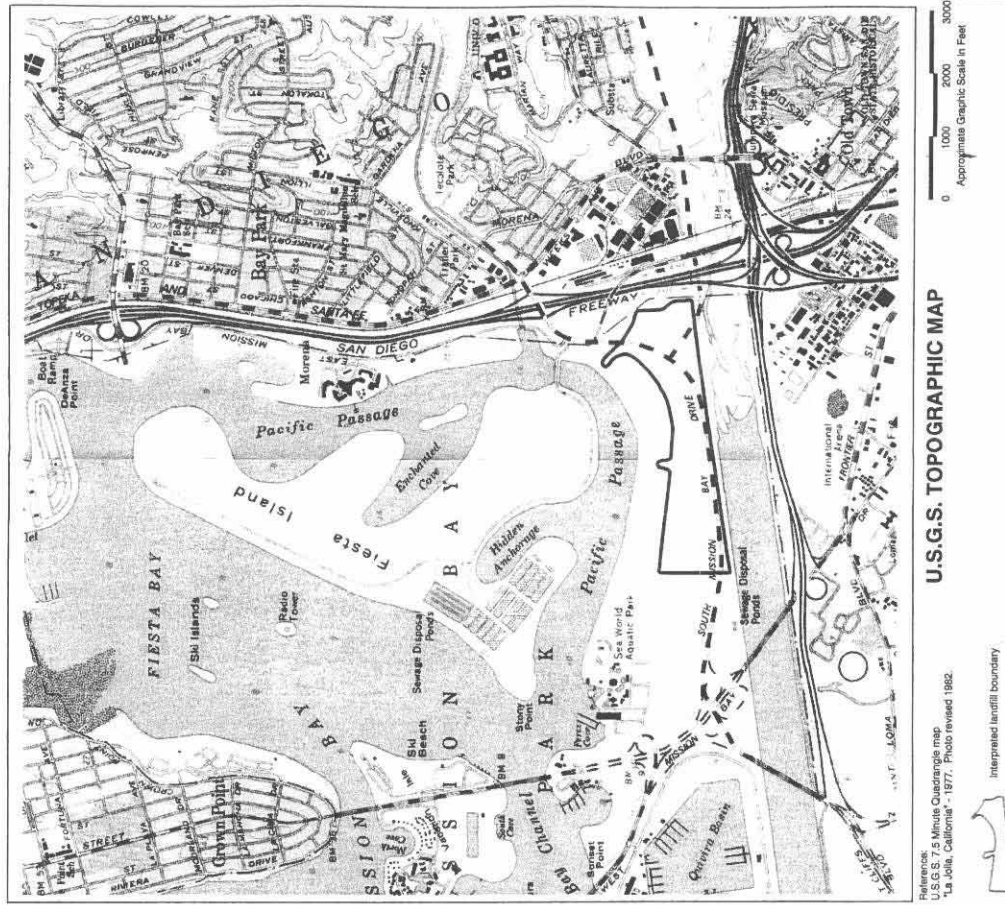
REGIONAL SITE LOCATION



SITE AERIAL PHOTOGRAPH

Note: Digital orthorectification provided by SCS to City of San Diego. Photograph dated March 2002.

Interpreted landfill boundary. Dashed line indicates areas where additional assessment appears necessary for landfill delineation.



U.S.G.S. TOPOGRAPHIC MAP

Reference:
U.S.G.S. 7.5 Minute Quadrangle map
"La Jolla, California" - 1977. Photo revised 1982.

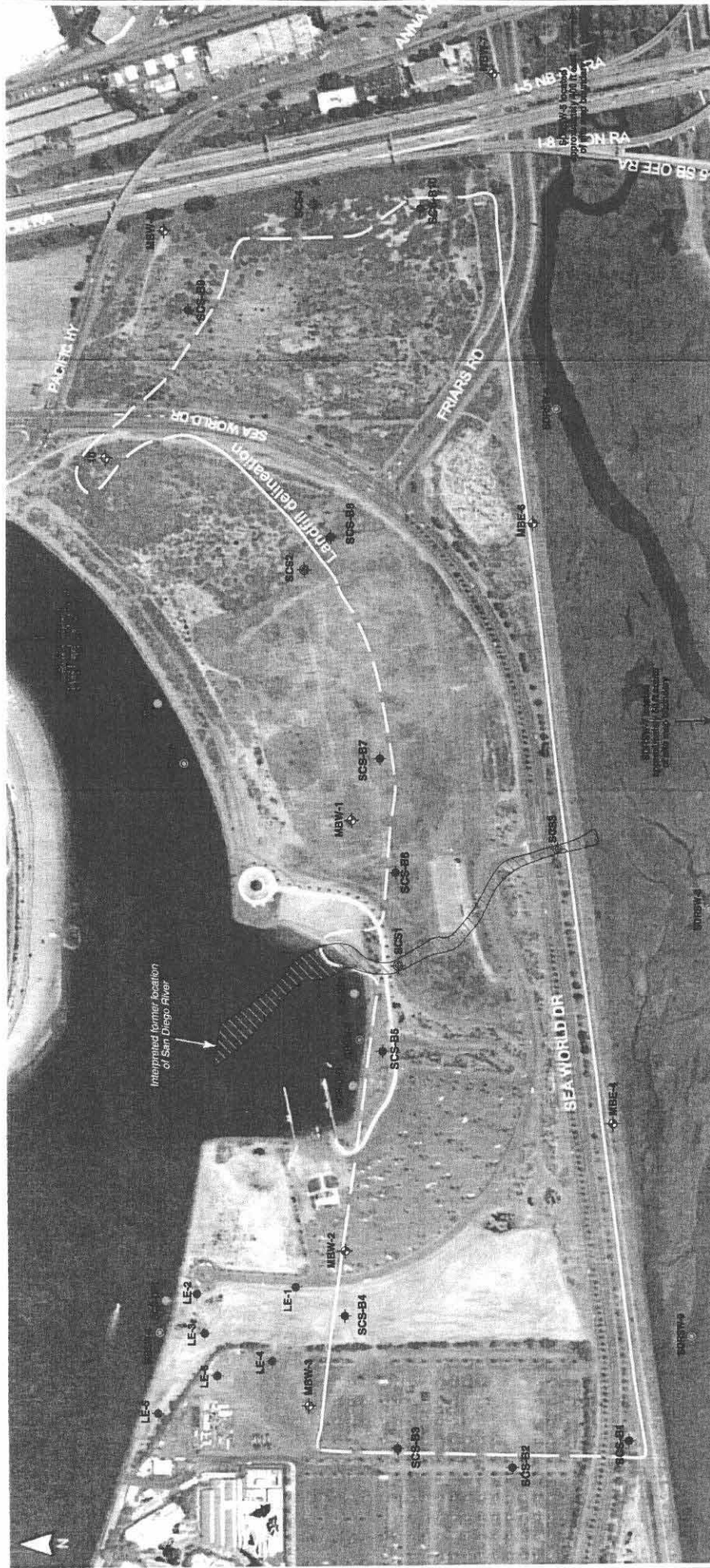
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
8799 Balboa Avenue, Suite 290
San Diego, California 92123

3-WAY SITE LOCATION MAP

City of San Diego
Mission Bay Landfill
San Diego, California

Project No.: 01203520.00
Figure 1.1
Date Revised: 3/2/04

Disclaimer: This figure is based on available data. Actual conditions may differ. All locations and dimensions are approximate.



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
 Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- Existing monitoring wells installed by Seaworld.
- Current existing monitoring wells.
- Proposed monitoring well locations.
- Former surface water sample location.
- Proposed soil and groundwater sample location (push probe/stratoprobe sampling).
- Proposed groundwater sample location collected (drivepoint).

EXISTING AND PROPOSED MONITORING WELLS AND SURFACE WATER SAMPLING LOCATIONS

SCS ENGINEERS
 ENVIRONMENTAL CONSULTANTS
 8799 Balboa Avenue, Suite 290
 San Diego, California 92123

City of San Diego
 Mission Bay Landfill
 San Diego, California

Project No.: 01203520.00
Figure 4.3
 Date Revised: 3/2/04



County of San Diego

COPY

GARY W. ERBECK
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH LAND AND WATER QUALITY DIVISION

P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(619) 338-2222 FAX (619) 338-2377
1-800-253-9933

RICHARD HAAS
ASSISTANT DIRECTOR

PROPERTY OWNER RESPONSIBILITY ACKNOWLEDGEMENT

Proposed locations for subsurface work:

Property Address:

Assessor's Parcel Number (APN)

Mission Bay Park (Former Mission Bay Landfill)

435-480-15-00

2512 Quivira Ct., San Diego, CA 92109

I, _____, owner of the property/properties listed above, give my permission to Environmental Business Solutions (An SCS Engineers Company) (consulting company, contractor) to conduct the following work at the locations stated above.

☒ Install 4 monitoring wells ☐ Destroy _____ monitoring wells ☐ Drill _____ soil borings

The person who causes to have a monitoring well installed or an existing well destroyed on this property is defined as the *Responsible Party*. San Diego County Code, Section 67.424, states that: "Monitoring wells shall be maintained to meet construction or destruction standards. If a monitoring well does not meet construction or destruction standards, the *Responsible Party* must repair, reconstruct or destroy the monitoring well so it meets the standards. The property owner, if different than the *Responsible Party*, must take the necessary actions to repair, reconstruct or destroy the monitoring well so it meets the standards if the *Responsible Party* does not complete the necessary actions."

A soil boring is used specifically to sample soil and, because there are construction and destruction standards, is included in the definition of a monitoring well even though no maintenance is required. These standards are outlined in the County of San Diego Site Assessment and Mitigation (SAM) Manual and the State of California Well Standards Bulletin 74-90.

I understand that Tessa McRae, Ph.D., R.G. 6582 (registered professional) of Environmental Business Solutions (An SCS Engineers Company) (consulting company) and authorized signer for West Hazmat Drilling Corp. (drilling company) have submitted a signed application to the Department of Environmental Health in which they have agreed to complete the above-stated work according the requirements of the current SAM Manual, all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction.

I also understand that if either the registered professional and/or the licensed drilling company should fail in their responsibilities as defined in San Diego County Code, Section 67.424, I, as the property owner, must take the necessary actions to repair, reconstruct or destroy the monitoring well so it meets the standards if the *Responsible Party* does not complete the necessary actions.

The scope of work covered by this Acknowledgement will expire one year from the date of the property owner's signature below. If an extension of time beyond one year is required to complete the proposed drilling activities or additional work is proposed, a new Property Owner Responsibility Agreement will be required.

Property Owner Signature: Steven F. Fontana Date: 5/25/04

Print Name: STEVEN F. FONTANA Title: Deputy Director

Company: City of San Diego/Environmental Services Dept/Disposal Div

Mailing Address: 9601 Ridgehaven Ct, Ste 310, San Diego, CA 92123

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2004 JUN 1 PM 12 11
D.E.H.
HAAS ROOM

COUNTY OF SAN DIEGO
DEPARTMENT OF
ENVIRONMENTAL
HEALTH

CV 06-14-04 15:00
LOS 1253
1

CV 141 428W24
\$455.10

CV 141 428W25
\$765.10

CHK \$1215.00



COUNTY OF SAN DIEGO

PERMIT RECEIPT

Page 1 of 1

RECEIPT NUMBER: 04-85302

APN: 435-480-15-00

DATE ISSUED: 14-JUN-2004

PERMIT: LMON 102307

SCOPE: MONITORING WELL/CATHODIC WELL

SITE ADDRESS: 2512 QUIVIRA CT

SUBDIVISION:

CITY: San Diego, CA 92109

PARCEL OWNER: CITY OF SAN DIEGO

ADDRESS: PUBLIC AGENCY

CITY/STATE/ZIP: , 00000

PERMIT OWNER:

ADDRESS:

CITY/STATE/ZIP:

Contractor

Company

Role

MANUEL MARQUEZ

TESTAMERICA DRILLING CORP DBA: WEST HAZMAT DRILLING

TESSA MCRAE

ENVIRONMENTAL BUSINESS SOLUTIONS

Fees Calculated 12 Months Back

<u>Date</u>	<u>Fee Code</u>	<u>Description</u>	<u>Paid to Date</u>	<u>This Receipt</u>	<u>Balance Due</u>
14-JUN-2004	6LWAB--EHO	ADDITIONAL SOIL BORING	\$0.00	\$450.00	\$0.00
14-JUN-2004	6LWAM--EHO	ADDITIONAL MONITORING WELL	\$0.00	\$420.00	\$0.00
14-JUN-2004	6LWMAINEHO	WELL MAINTENANCE FEE	\$0.00	\$90.00	\$0.00
14-JUN-2004	6LWMAIXEHO	ADDITIONAL WELL MAINTENANCE FEE	\$0.00	\$90.00	\$0.00
14-JUN-2004	6LW25--EHO	MONITORING WELL	\$0.00	\$165.00	\$0.00
14-JUN-2004	6ASUSP---O	SUSPENSE ACCOUNT	\$0.00	\$120.00	\$0.00
Totals:				\$1,335.00	\$0.00

<u>Payment Code</u>	<u>Description</u>	<u>Amount</u>
CHECK	10222-\$570.00, 18005-\$765.00	\$1,215.00
REFUND	REFUND APPROVED	\$120.00

Tendered:	\$1,335.00
Change:	\$0.00
Balance Due:	\$0.00

PAID 06-14-04 15:02
04-85302
12500
420.00



PERMIT #LMON102307
A.P.N. #435-480-15-00
EST #H186426

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION

MONITORING WELL PERMIT EXTENSION

SITE NAME: FORMER MISSION BAY SLF

SITE ADDRESS: 2512 QUIVIRA CT., SAN DIEGO, CA 92123

PERMIT FOR: **4 GROUNDWATER MONITORING WELLS & 10 SOIL BORINGS**

ORIGINAL EXPIRATION DATE: OCTOBER 12, 2004

THIS WELL PERMIT HAS BEEN EXTENDED AT THE REQUEST OF THE
PERMITEE. ALL CONDITIONS ON THE ORIGINAL OR MODIFIED PERMIT ARE
STILL IN EFFECT.

REQUEST RECEIVED: SEPTEMBER 28, 2004

NEW EXPIRATION DATE: FEBRUARY 9, 2005

APPROVED BY:  DATE: 9/29/2004
ERNESTO L. PROFETA

NOTIFIED: 

RECEIVED

OCT 01 2004

COUNTY OF SAN DIEGO
DEPARTMENT OF
ENVIRONMENTAL
HEALTH

REG 09-29-04 13:12
ROSE 138338
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9141 141 428425460.00
CHK \$60.00

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OCT 01 2004

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SCS Engineers Co